Claims

1.   An access unit which accesses a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, comprising:

a recording means for recording test data based on a predetermined test condition in the user area;

a reading means for reading the test data recorded in the user area by the recording means; and

an adjusting means for referring to the test data read by the reading means, and adjusting an access parameter for accessing the record medium.

2.   The access unit according to claim 1, further comprising a registering means for registering a test-record area in which the test data is recorded within the user area.

3.   The access unit according to claim 2, wherein the registering means registers the test-record area as a defective area.

4.   The access unit according to claim 1, wherein the recording means records the test data in a position which is a predetermined distance apart in the radius directions of the record medium from a position in which user data is

recorded within the user area.

5.   The access unit according to claim 4, wherein the recording means begins recording the test data from a position which is a predetermined distance apart in the radius directions of the record medium from a position in which user data finishes being recorded within the user area, and begins recording user data from a position which is a predetermined distance apart in the radius directions of the record medium from a position in which the test data finishes being recorded.

6.   The access unit according to claim 5, further comprising a registering means for registering, as a defective area, a test-record area in which the test data is recorded within the user area, an area from a position in which user data finishes being recorded to a position in which the test data begins being recorded, and an area from a position in which the test data finishes being recorded to a position in which user data begins being recorded.

7.   The access unit according to claim 4, wherein the recording means : begins recording the test data from a position which is a predetermined distance apart in the radius directions of the record medium from a position in which user data finishes being recorded within the user area; executes a return from a position in which the test data finishes being recorded

to the position in which the user data finishes being recorded; records user data up to the position in which the test data begins being recorded; executes a movement from the position in which the test data begins being recorded to the position in which the test data finishes being recorded; and begins recording user data from the position in which the test data finishes being recorded.

8.   The access unit according to claim 4, wherein the recording means: begins recording the test data from a position which is a predetermined distance apart in the radius directions of the record medium from a position in which user data finishes being recorded within the user area; executes a return from a position in which the test data finishes being recorded to the position in which the user data finishes being recorded; and begins recording user data from the position in which the user data finishes being recorded.

9.   The access unit according to claim 1, wherein:

the reading means reads user data which is already recorded in the user area;

a record-state detecting means is further provided for detecting a record state of the user data read by the reading means; and

the recording means records the test data in the user area, based on a record state which is detected by the

record-state detecting means.

10.   The access unit according to claim 9, wherein the record-state detecting means detects at least one of a jitter value, an asymmetry value, an error rate and an M-index of the user data read by the reading means.

11.   The access unit according to claim 1, wherein the recording means records the test data in a track adjacent to the user data.

12.   An access method for accessing a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, including:

        a recording step of recording test data based on a predetermined test condition in the user area;

        a reading step of reading the test data recorded in the user area in the recording step; and

        an adjusting step of referring to the test data read in the reading step, and adjusting an access parameter for accessing the record medium.

13.   An access program for accessing a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction

given by a user, allowing,

an access unit which includes a recording means for recording data in a record medium and a reading means for reading data from a record medium, to function as:

a record instructing means for instructing the recording means to record test data based on a predetermined test condition in the user area;

a read instructing means for instructing the reading means to read the test data recorded in the user area by the recording means; and

an adjusting means for referring to the test data read by the reading means, and adjusting an access parameter for accessing the record medium.

14. A control unit which controls an access unit, the access unit including a recording means for recording data in a record medium and a reading means for reading data from a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, comprising:

a record instructing means for instructing the recording means to record test data based on a predetermined test condition in the user area;

a read instructing means for instructing the reading means to read the test data recorded in the user area by the recording means; and

an adjusting means for referring to the test data read by the reading means, and adjusting an access parameter for accessing the record medium.